

GM



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

JAN 23 2007

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First St. NE, Room 1A
Washington, D.C. 20426

Reference Docket Nos. PF05-4, CP06-54-000, and CP06-55-000

Dear Ms. Salas:

The U.S. Environmental Protection Agency (EPA) has reviewed the draft environmental impact statement (DEIS) for the Broadwater Liquefied Natural Gas (LNG) terminal and pipeline (CEQ # 20060479). The proposed terminal and pipeline would be located in New York State waters of the Long Island Sound, approximately nine miles from the nearest shoreline of Long Island, and about eleven miles from the nearest shoreline in Connecticut. This review was conducted in accordance with Section 309 of the Clean Air Act, and the National Environmental Policy Act (NEPA).

The proposed LNG terminal would be a floating storage and regasification unit (FSRU) that would be attached to a yoke mooring system (YMS) that includes a mooring tower embedded in the seafloor. The FSRU would look like a marine vessel, 1,215 feet long, 200 feet wide, and 48 feet above the waterline at the primary hull, and would pivot around the YMS, enabling the FSRU to orient in response to the prevailing wind, tide, and current conditions. LNG would be delivered to the FSRU by LNG carriers (on average two to three per week), temporarily stored, regasified, and then transported in a new subsea natural gas pipeline that would extend from the seafloor beneath the FSRU approximately 21.7 miles to an offshore connection with the existing Iroquois Gas Transmission System pipeline in Long Island Sound. Approximately 118 carrier deliveries are expected per year.

Comments

EPA commends the Federal Energy Regulatory Commission (FERC) on its efforts to work with all the cooperating agencies during the preparation of this DEIS. The document reflects many of the issues brought forth during interagency meetings and discussions. We also appreciate the recognition of the Long Island Sound Estuary as a resource of particular importance receiving significant public investment. Our remaining comments on the document are as follows:

Air Quality

- In order to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS), FERC included a discussion of the air impacts of the anticipated emissions from the proposed Broadwater project and other background sources of emissions (page 3-181). The DEIS states that air impacts were evaluated with the EPA dispersion models, Offshore Coastal Dispersion (OCD) and AERMOD Prime, and that meteorological data collected from a nearby buoy by the University of Connecticut was used as input to the dispersion models. EPA recommends that a copy of the modeling analyses be included as an appendix of the Final Environmental Impact Statement (FEIS) in order to help support the findings from the models.
- During discussions concerning facility permitting, Broadwater representatives were informed by EPA and the New York State Department of Environmental Conservation (NYSDEC) that the meteorological period selected for input to the dispersion models was not appropriate. In response, Broadwater staff stated that they would obtain a better quality meteorological data set and submit an updated modeling analysis. We recommend that this new meteorological data set be used to update the NEPA analysis as well.
- Though the input data for the modeling analyses are going to be revised and, therefore, results may change, EPA would like to note that the table of impacts in the DEIS using AERMOD-Prime (Table 3.9.1 – 15) shows a 24 hour average PM_{2.5} concentration of 59 ug/m³. This value would exceed the recently revised PM_{2.5} NAAQS of 35 ug/m³ and would warrant discussion in the FEIS.

Air Quality – General Conformity

- Appendix F provides a “Draft General Conformity Evaluation” with a disclaimer that “Additional information from Broadwater is required to finalize this document...” As indicated in the DEIS, the current discussion of the conformity determination does not include substantive information about project emissions subject to conformity or about the method by which the project will demonstrate conformity. This type of information is usually included in conformity determinations issued for public comment under 40 CFR 93.156. Once the final general conformity determination has been completed, it will also need to be noticed under 40 CFR 93.156.
- Appendix F, sections 4.0 and 5.0 at page F-3, indicate generally that FSRU emissions will be excluded from the conformity analysis because they are subject to stationary source permitting. However, please note that the permitting exclusion provided in 40 CFR 93.153(d)(1) only excludes emissions governed by a major nonattainment new source review (NSR) permit or a prevention of significant deterioration (PSD) permit. A minor NSR permit or an operating permit under Title V does not provide an exemption for emissions from the conformity regulations. Given the discussion in the DEIS (section 5.1.9, page 5-

11), which suggests that some of the emissions from the FSRU will not trigger a major NSR or PSD permit requirement, it appears that the FSRU emissions may need to be included in the conformity analysis.

- Appendix F, section 5.0, last sentence, indicates that the conformity analysis will exclude “propulsion engine emissions.” We are concerned that excluding propulsion engine emissions from the conformity determination does not appear to be consistent with the requirement in 40 CFR 93.159(d) that all direct and indirect emissions from the project be addressed in the determination.
- Appendix F, section 6.0, paragraph 1, suggests that the New York State Implementation Plan (SIP) would need to be revised before the threshold levels for a moderate ozone nonattainment area would apply. Based on the references in Appendix F to the federal conformity regulations in Part 93, it appears that FERC is applying EPA’s conformity regulations, not a federally-approved state conformity regulation. If so, the thresholds applicable to a moderate area under 40 CFR 93.153(b)(1) would apply directly based on the designation and classification EPA gave the area. Therefore, a further SIP revision would not be required to make that classification applicable to the area. Further, we note that the discussion does not appear to reflect the fact that this nonattainment area is in the Ozone Transport Region (OTR), and that the discussion appears to reverse the thresholds that would apply to NOx and VOC in the OTR. Accordingly, we recommend that the applicable thresholds be reviewed and clarified, if necessary.
- In the absence of emissions numbers, we cannot determine at this time if conformity is applicable to emissions of PM 2.5 and its precursors. The applicability discussion in Appendix F, section 5.0, suggests that conformity might apply to PM 2.5 pollutants. If so, we recommend that section 6.0 address PM 2.5 pollutants, as well as NOx and VOC for ozone nonattainment purposes.
- Section 5.1.9, at p. 5-11, indicates that construction is scheduled to occur outside the ozone season. If FERC is planning to exclude any construction emissions from the conformity analysis because the emissions will not occur in the ozone season, we recommend that the FERC license or some other legally binding commitment limit construction to the non-ozone season. Without such a binding requirement, there would not be a basis for excluding those emissions from the conformity analysis. In addition, we recommend that the FEIS contain verification that the NYSDEC has approved limiting construction to the non-ozone season as an appropriate basis for excluding those emissions from the conformity analysis.

Water Quality

- The DEIS recognizes that the scaled-down subsea plow method proposed by Broadwater to address trenching through the coarser substrate along Stratford Shoal may not be successful. FERC staff (page 3-14) recommended that Broadwater provide a contingency plan to the Secretary prior to implementation of an alternative installation method. EPA recommends that the contingency plan regarding an alternative to subsea plowing in the Stratford Shoals be included in the FEIS in order to allow for an analysis of the potential impacts of another method of laying the pipeline.
- According to the DEIS, Broadwater proposes to create the pipeline trench with a subsea plow and to backfill less than 10 percent of the trench length, and allow the remaining trench to naturally backfill. Alternatively, FERC staff (page 5-2) recommend "that Broadwater actively backfill the entire length of the pipeline trench and develop post-construction monitoring criteria in coordination with federal and state resource agencies." We agree with the conclusion in the DEIS that "the success and timing of natural backfilling is uncertain" (page ES-8) and support the FERC staff recommended license condition #15 that would require Broadwater to develop a plan describing methods to mechanically backfill the trench, as well as incorporating detailed post-construction monitoring criteria to assess success. While we recognize that the active backfilling would generate some additional sediment disturbance and turbidity in the water column, we believe it would restore the benthic environment to its preconstruction condition as expeditiously as possible and ultimately lead to faster recovery of benthic communities. As noted in the DEIS, an open trench can potentially be a migration obstacle to biota and an exposed pipeline could have potential limited thermal impacts (page E-30).
- The DEIS states that the temperature of the natural gas in the riser will decrease from 130° to 120° F from the top of the riser to its insertion point in the subsea pipeline (page 3-35) and that there will be no predicted increase in water temperature approximately 4 feet from the riser due to mixing to ambient temperatures. We recommend that the modeling and analysis to support this conclusion be included in the FEIS. We also suggest that FERC consider conducting an analysis to determine whether the warmer water produced by the riser would enhance the development or growth of nuisance organisms.

Biological Resources

- We recommend that a more detailed discussion of operational underwater noise and its impacts be included in the FEIS. In particular, we recommend that the FEIS include a discussion of any of the specific recommendations to protect marine organisms during construction and operation of the project that result from the coordination that would be required by proposed license condition # 17 (5-20).

General

- The DEIS (page 4-39) states that Iroquois Gas Transmission System L.P. is considering construction of a 24-inch-diameter Brookhaven Lateral gas line that may have an effect on two of the alternative pipeline routes. We recommend that the FEIS address the Brookhaven Lateral docket PF05-16 and update the status of that project and its possible impact to the Shoreham and Scott's Beach alternative routes.
- We recommend that the information on the Roosevelt Island Tidal Energy Project on page 4-4 be updated to reflect that the project is currently in a demonstration phase and producing electricity.

In light of our concerns over the potential environmental impacts from the proposed project, as well as our recommendations for additional information and analyses, EPA has rated the DEIS as Environmental Concerns – Insufficient Information (“EC-2”) (see enclosed rating sheet). If you have any questions regarding this review or our comments, please contact Lingard Knutson at 212-637-3747.

Sincerely yours,



John Filippelli, Chief
Strategic Planning and Multi-Media Programs Branch

Enclosure

